FORUM

Keeping the Bloom on the Floral and Nursery Industry

As you decorate for the holidays this season, ponder this riddle: What's been growing in the backyards of America at such a rapid rate each year that if it were an animal it would be at least as large as King Kong by now, yet it's virtually invisible?

The answer is as close as the pine tree you're hanging bulbs on, or the poinsettias on your dining room table: the floral and nursery industry.

Perhaps it's because it's spread over thousands of businesses across the country—many small and family-owned—that it's not widely known that this agricultural enterprise had retail sales of more than $12 billion last year, placing it fourth as a cash crop behind corn; soybeans; and fruits, nuts, and berries.

The industry sells about 60 million poinsettias alone every year, with a wholesale value of $228 million. Floral and nursery crops are among the top 5 commodities in 27 states and among the top 10 commodities in 42 states. Gardening is the number one hobby in the United States.

It's hard to find a town or city that doesn't have a greenhouse or nursery business serving it. And that's just the production end of the industry. When you add in the service part—garden centers, florists, lawn maintenance, landscape companies—you're way above the $12 billion figure. The industry is important to both rural and urban communities.

ARS has joined with industry and universities to create the Floriculture and Nursery Research Initiative, a research program to benefit this industry. And it's none too soon, because until this initiative began, the industry received relatively few federal research dollars.

The American Nursery and Landscape Association (ANLA), the Society of American Florists, and the Ohio Florists Association launched the initiative proposal in 1996 when they asked ARS for research help.

In fiscal year 2000, the initiative spent a total of $3.2 million to fund ARS research in Washington, D.C., Maryland, Tennessee, Oregon, and Ohio, as well as university research at Ohio State University (OSU) at Columbus and Wooster; Carnegie-Mellon University at Pittsburgh, Pennsylvania; and others.

The cover story, beginning on page 4 of this issue, describes the promising work of ARS researchers at Wooster, Ohio, who receive $300,000 a year in initiative funds for improving pesticide spray application in greenhouses and nursery fields. These scientists are aided in their work by being part of the newly opened Molecular and Cellular Imaging Center, a facility shared by ARS and OSU's Ohio Agricultural Research and Development Center (OARDC) in Wooster.

The imaging lab is giving horticultural researchers the tools they need to see things for the first time, like where fungicide droplets land on a plant compared to where the targeted disease fungi are. These pesticides—whether chemical or biological—are what ensure the quality of the plants we buy. In the case of poinsettias, the industry is in a constant battle against whiteflies, spider mites, and a fungal disease called powdery mildew, to name a few of the colorful holiday plant's enemies.

ANLA's Ashby Pamplin is rightfully excited by the prospects of combining this research with robotic pesticide spraying research at Carnegie-Mellon University. This would place precision agriculture in nurseries for the first time and greatly increase worker safety while improving production.

The promising work from the ARS and OSU researchers at Wooster is a tribute to the efforts of OARDC, led by Steven A. Slack, and the Ohio horticulture industry.

The horticulture industry has given tremendous support to researchers. They are an extremely forward-looking group who recognize that their future depends on continuous research discoveries.

The industry represents a promising new area for long-term federal research investment, with environmentally friendly dividends. This industry is dramatically changing the face of the American landscape, and we're all the healthier for it, both physically and psychologically. Potted plants and landscape plants offer us more oxygen to breathe. Native plant gardens are appearing more frequently from coast to coast, as customers and the industry strive for plants that require less water and fewer chemicals. Wildlife benefits too, as native plants tend to attract more of the local fauna.

The industry also helps the environment by selling plants that are used to control erosion on roads, farms, and streambanks and to revegetate damaged lands. Some plants are even reclaiming soils damaged by heavy metals and pollutants.

Trees shade homes in summer and act as wind barriers in the winter, saving electricity and other fuels. They provide a similar cooling function for the stream homes of trout and other aquatic life.

The industry is always on the lookout for new varieties for all these purposes. The Ornamental Plant Germplasm Center at OSU's main campus in Columbus, newly created with initiative funding of $400,000 a year, will be invaluable to the industry's development of new ornamental varieties.

The beautification of America begun by Lady Bird Johnson in the 1960s is continuing, but largely unseen, perhaps because it's in plain sight. But today, it is much bigger than ever before, and it now has much more than a slight environmental tinge to it.

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